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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,579	11/18/2003	Atsushi Harada	JP920010240US1	4754

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EXAMINER	
RIZK, SAMIR WADIE	
ART UNIT	**PAPER NUMBER**
2133	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,579	HARADA, ATSUSHI	
	Examiner	Art Unit	
	Sam Rizk	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *11-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/18/2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

- Claims 1-18 have been submitted for examination
- Claims (11-18) have been restricted
- Claims (1-10) have been rejected

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims (1-3),(4-6) (7,8) and (9,10) drawn to a method and system for transmitting and receiving data between terminal devices on a network.

Claims (1-3),(4-6) (7,8) and (9,1) are classified in class 714, subclass 786.

II. Claims (11,12) and (15,16) drawn to a data transmitting device for transmitting data via a network.

Claims (11,12) and (15,16) are classified in class 714, subclass 786.

III. Claims (13,14) and (17,18) drawn to a data receiving device for receiving data transmitted via a network.

Claims (13,14) and (17,18) are classified in class 714, subclass 786.

Inventions groups I,II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, invention subcombination Group I has separate utility such as

transmitting and receiving data between terminal devices. In the instant case, invention subcombination Group II has separate utility such as data transmitting device for transmitting data via a network. In the instant case, invention subcombination Group III has separate utility such as data receiving device for receiving data transmitted via a network.

During a telephone conversation with attorney David Irvin on 5/23/2006 a provisional election was made without traverse to prosecute the invention of Group I, claims (1-10). Affirmation of this election must be made by applicant in replying to this Office action. Claims (11-18) are withdrawn from further consideration by the examiner as being drawn to a non-elected invention. See 37 CFR 1.142(b).

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Related Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Zdunek US patent no. 4159469 (Hereinafter Zdunek).

5. In regard to claim 1, Zdunek teaches:

- A method for transmitting and receiving data between terminal devices on a network, comprising the steps of:

(Note: Figures (1 & 20 in Zdunek)

- dividing a data file of original data to be transmitted into clusters each having k blocks of data;

(Note: Figure 1, reference signs (1-60) in Zdunek)

- generating t+s blocks of parity data for a cluster by encoding s blocks of convolution data and k blocks of original data;

(Note: col. 3, lines (55-60) in Zdunek)

- generating k+t blocks of transmission data using the k blocks of original data and t blocks selected from the parity data; and

- transmitting the transmission data to another terminal on the network.

(Note: Figure 1, reference signs ((101a-160a) and (s4) and col. 4, lines (4-14) in Zdunek)

6. In regard to claim 2, Zdunek teaches:

- The method according to claim 1, wherein the convolution data for a first cluster is generated using data from a second cluster.

(Note: col. 3, lines (47-57) in Zdunek)

7. In regard to claim 3, Zdunek teaches:

- The method according to claim 1, wherein transmission data is generated by adding, to the original data of the cluster, t' blocks of data from the t+s blocks of parity data, where t'>t .

(Note: any on the output registers in figure 1, reference signs (101a)-(160a))

8. In regard to claim 4, Zdunek teaches:

- A method for transmitting and receiving data between terminal devices on a network, comprising the steps of:

(Note: Figures (1 & 20 in Zdunek)

- dividing a data file of original data to be transmitted into clusters;

(Note: Figure 1, reference signs (1-60) in Zdunek)

- generating parity data for a first cluster by encoding original data of the first cluster using information from a second cluster;

(Note: col. 3, lines (55-60) in Zdunek)

- generating transmission data by adding the parity data to the original data; and
- transmitting the transmission data to another terminal on the network.

(Note: Figure 1, reference signs ((101a-160a) and (s4) and col. 4, lines (4-14) in Zdunek)

9. In regard to claim 5, Zdunek teaches:

- The method according to claim 4, wherein the parity data is generated by encoding the original data using data selected from parity data of the second cluster.

(Note: Figure 1, reference sign (82) in Zdunek)

10. In reference to claim 6, Zdunek teaches;

- The method according to claim 4, wherein at least part of the parity data of the first cluster is added to original data of the second cluster when original data of the second cluster is encoded.

(Note: col. 3, lines (1-15) in Zdunek)

11. In regard to claim 7, Zdunek teaches:

- A method for transmitting and receiving data between terminals on a network, comprising the steps of:
- receiving a data string including original data divided into clusters and parity data

(Note: Figure 2, reference signs (201a)-(260a) in Zdunek)

- if data of a given cluster is lost during communication, decoding remaining data of the given cluster and restoring original data of the given cluster and convolution data used to generate parity data for the given cluster;

(Note: col.5, lines (10-35) in Zdunek)

- unless the number of blocks of data in the given cluster is sufficient to restore the original data and the convolution data, complementing and decoding data of the given cluster using restored data of another cluster, and restoring the original data and the convolution data; and

(Note: col.5, table I in Zdunek)

- generating a data file by concatenating the original data of the clusters.

(Note: Figure 2, reference signs (301a)-(360a) in Zdunek)

12. In regard to claim 8, Zdunek teaches:

- The method according to claim 7, wherein, unless the number of received blocks of data of the given cluster is sufficient to restore the original data and the convolution data, data of the given cluster is complemented using data acquired by encoding original data and convolution data restored in a cluster immediately before or immediately after the given cluster.

(Note: col. 4, lines (35-45) in Zdunek)

13. In regard to claim 9, Zdunek teaches:

- A communication system for exchanging data between terminal devices via a network, comprising:
- a transmitting terminal device that divides a data file of original data into clusters,

(Note: Figure 1, reference signs (1-60) in Zdunek)

- generates parity data for a cluster by encoding data in the cluster using data in a second cluster, and transmits, over a network, transmission data generated by adding the parity data to original data of the cluster; and

(Note: Figure 1 in Zdunek)

- a receiving terminal device that receives the transmission data transmitted by the transmitting termini device and restores the original data for the cluster if part of the transmission data is lost during communication.

(Note; Figure 2 in Zdunek)

14. In regard to claim 10, Zdunek teaches:

- The communication system according to claim 9, wherein, unless the number of blocks of received transmission data of the cluster is sufficient to restore original data lost during communication, the receiving terminal device complements the cluster using restored data of the second cluster and restores the original data of the cluster.

(Note: col. 4, lines (35-45) in Zdunek)

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hohberger et al. US publication no. 2005/0237155 teaches electronic identification system with forward error correction system
- Kim et al US patent no. 6442729 teaches convolution code generation with respect to input data word by word.
- Wan US patent no. 6567938 teaches convolution decoding terminated by an error detection block code with distributed parity bits.
- Hunt US publication no. 2002/0016943 teaches code structure, encoder, encoding method and associated decoder and decoding method.
- Berger et al US publication no. 2003/0221156 teaches method and apparatus for concatenated punctured encoding and decoding of a communications signal
- Macy US patent 3697947 teaches character correcting coding system and method for driving the same.
- Karplus US patent no. 5157671 teaches semi-systolic architecture for decoding error-correcting codes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.

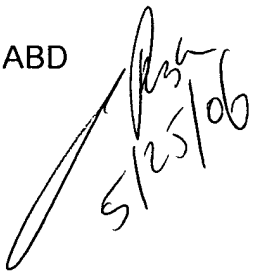
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk, MSEE, ABD

Examiner

ART UNIT 2133



GUY LAMARRE
PRIMARY EXAMINER